

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN**

August 2003

Prepared by the
Office of the Delaware River Master
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during August was excessive for the third consecutive month. The maximum daily mean discharge of 12,200 cfs occurred on August 12. The minimum daily mean discharge was 1,910 cfs on August 29.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during August was 4,834 cfs, which is 232 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 5,770 cfs, or 395 percent of median (water years 1961-90).

On the basis of an 11-station average, precipitation during August was 4.80 inches, which is 126 percent of the 62-year average. The maximum daily-average precipitation during the month was 0.73 inches on August 2. Precipitation in the upper Delaware River Basin during the past 12 months was 7.26 inches more than the long-term average. Precipitation during August was 0.98 inches more than the long-term average for the month.

Combined storage September 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 97 percent of capacity above the point of maximum depletion. The combined storage of 262 billion gallons was 3 billion gallons more than that of one month ago and 100 billion gallons more than that of one year ago. **Combined storage on September 1, 2003, was the highest of record for the first day of September.** Median storage on the first day of September in 36 years of record is 197 billion gallons. Pepacton Reservoir spilled 1,095 million gallons in mid-August. Cannonsville and Neversink Reservoirs spilled 79 and 17 million gallons, respectively, in mid-August.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during August were above average in all of the wells. Water levels in 8 of the wells were below July 2003 levels, and water levels in all of the wells were above August 2002 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Aug. 2002		September 2002 to August 2003					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Sept.	3.86	43.11	5.40	50.37	140	117	+1.54	+7.26
Oct.	3.35	39.25	6.30	44.97	188	115	+2.95	+5.72
Nov.	3.79	35.90	3.96	38.67	104	108	+.17	+2.77
Dec.	3.35	32.11	4.66	34.71	139	108	+1.31	+2.60
Jan.	2.98	28.76	*2.64	30.05	89	104	-.34	+1.29
Feb.	2.63	25.78	2.59	27.41	98	106	-.04	+1.63
Mar.	3.36	23.15	3.00	24.82	89	107	-.36	+1.67
Apr.	3.74	19.79	2.63	21.82	70	110	-1.11	+2.03
May	4.22	16.05	3.57	19.19	85	120	-.65	+3.14
June	3.99	11.83	6.87	15.62	172	132	+2.88	+3.79
July	4.02	7.84	3.95	8.75	98	112	-.07	+.91
Aug.	3.82	3.82	4.80	4.80	126	126	+.98	+.98

Note: Amount shown in cumulative columns is total from month shown to present.

* Revised since last month.

STREAMFLOW, IN CFS

DELAWARE RIVER AT MONTAGUE, N.J.

Month	1940-2002			2003 Monthly mean	Percent of median
	Maximum	Median	Minimum		
August (observed)	14,230 (1955)	2,088	715 (1954)	4,834	232
August (adjusted)	17,410 (1955)	1,341	364 (1964)	5,770	430
September (observed)	9,167 (1960)	1,994	892 (1941)		
September (adjusted)	10,720 (1960)	1,428	324 (1964)		